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REMARKS

Claims 1, 3-27, 29-39 and 41 are currently pending in the subject application and are presently under consideration. Claim 41 has been cancelled, and new claim 42 has been added herein. Additionally, claims 1, 3, 5, 7-10, 12-24, 27, 29, 33, 34, and 39 have been amended herein. A listing of pending claims and associated status identifiers can be found at pages 2-8. Additionally, applicants' representative thanks the Examiner for courtesies extended during a telephone interview of March 2, 2006, wherein it was agreed that the cited art fails to make obvious claims 8 and 31. Applicants' representative reserves the right to incorporate these claims into respective independent claims at a later point in prosecution; however, such amendments are not believed to be necessary in view of the comments below.

Favorable reconsideration of the subject patent application is respectfully requested in view of the following comments.

I. Rejection of Claim 41 Under 35 U.S.C. §101

Claim 41 stands rejected under 35 U.S.C. §101 as allegedly being directed towards non-statutory subject matter. Claim 41 has been cancelled herein. It is thus respectfully requested that this rejection be withdrawn.

II. Rejection of Claims 1, 3-13, 15-27, 29-39, and 41 Under 35 U.S.C. §103(a)

Claims 1, 3-13, 15-27, 29-39, and 41 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Johnson, *et al.* (US 6,567,805) in view of Hobson, *et al.* (US 5,694,559). Withdrawal of this rejection is respectfully requested for at least the following reasons. Johnson, *et al.* and Hobson, *et al.*, alone or in combination, fail to teach or suggest each and every aspect as recited in these claims.

To reject claims in an application under §103, an examiner must establish a *prima facie* case of obviousness. A *prima facie* case of obviousness is established by a showing of three basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference

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teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. See MPEP §706.02(j). The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. See *In re Vaack*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The claimed invention facilitates efficient retrieval of information by hierarchically arranging a plurality of classifiers that are associated with categories and performing a dialogue to aid in pinpointing a desired category. To that end, independent claims 1 recites *a hierarchal analysis component that receives a query and processes probabilities associated with N categories that are collectively assigned a top-level classifier and individually assigned sublevel classifiers* (independent claims 27 and 29 recite similar aspects). Johnson, *et al.* and Hobson, *et al.* fail to teach or suggest these aspects.

Johnson, *et al.* describes assigning a query to a predefined category to assist in retrieval of information. In more detail, Johnson, *et al.* describes receiving a query and extracting text from such query. The extracted text is then associated with a particular category, and a constrained search can be undertaken within the category based at least in part upon the extracted text. Additionally or alternatively, Johnson, *et al.* contemplates requesting additional information from a user and employing such additional information together with previously provided information to provide the user with an answer to one or more queries. To determine a category to assign to a received query, a score indicating a degree of a match to the query is calculated. Johnson, *et al.* additionally contemplates use of a session history in connection with discerning the aforementioned scores (*e.g.*, the probabilities may be determined based at least in part upon prior queries). Johnson, *et al.*, however, fails to disclose, teach, or suggest *N categories that are collectively assigned a top-level classifier and individually assigned sublevel classifiers* as recited in the subject claims.

The Examiner asserts that rules and a rule file shown in Fig. 4 and described in accompanying text of Johnson, *et al.* teach or suggest the above claimed aspects.

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Applicants' representative respectfully disagrees with such assertion. As described above, Johnson, *et al.* teaches extracting text and thereafter assigning the text to a particular category. To that end, Johnson, *et al.* discloses utilization of a text categorizer that assigns received text to one or more predefined categories. The text categorizer can apply rules that are existent within a rule file to aid in categorizing the received text. (See col. 8, lines 19-38). Nowhere in Johnson, *et al.*, however, is there any indication that these rules are *classifiers* as claimed, much less classifiers that are provided by at least one of a Support Vector Machine, Naive Bayes, Bayes Net, decision tree, similarity-based, vector-based and a Bayesian-based classification model (as recited in independent claim 39).

Furthermore, there is no indication that the rules are hierarchically assigned to categories as is implicit within the subject claims. In other words, defined categories within Johnson, *et al.* are not collectively associated with a top-level rule and each individual category is not assigned a sublevel rule. Rather, Johnson, *et al.* teaches that each rule is a conjunction of conditions involving presence or absence of features in text, yielding, when all conditions are satisfied, a category to be assigned to the text. (See col. 8, lines 30-33). Therefore, rules are associated with conditions in text and are not *assigned to categories* as is recited in these claims.

Additionally, with respect to dependent claims 8 and 31, Johnson, *et al.* fails to disclose, teach, or suggest *a data structure that includes a mapping of I possible queries and one or more associated topics, I being an integer, to enable learning for the classifiers, the data structure is centrally located and retains monitored implicit and explicit user actions associated with queries from a plurality of users to facilitate improved learning models*. Rather, Johnson, *et al.* is silent with regards to monitoring and retaining implicit user actions to facilitate improved learning models as claimed. In contrast, the passage cited by the Examiner as teaching the claimed aspects describes the rule file, which can include rules that are generated by hand or through symbolic rule induction (*e.g.*, deriving the rules from particular facts). (See col. 8, lines 24-30). It is clear that this passage specifically (and Johnson, *et al.* generally) is deficient with respect to *monitoring and retaining* implicit and explicit user actions associated with queries to facilitate improved learning models as is recited in dependent claims 8 and 31.

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Hobson, *et al.* fails to make up for the aforementioned deficiencies of Johnson, *et al.* Hobson, *et al.* teaches an improved on-line help system, wherein a query is provided by a user searching for a particular help topic and a partial analysis is performed upon such query, including identifying keywords within the query, disambiguating keywords within the query, and generating a ranked list of candidate topics. Like Johnson, *et al.*, Hobson, *et al.* is deficient with respect to the use of a classifier that is created/trained for general use with a plurality of categories and classifiers that are specifically designed for individual categories within the plurality of categories.

In view of at least the foregoing, it is respectfully requested that the rejection of claims 1, 27, and 39 (and all claims that depend therefrom) be withdrawn.

III. Rejection of Claim 14 Under 35 U.S.C. §103(a)

Claim 14 stands rejected under 35 U.S.C. §103(a) as being obvious over Johnson, *et al.*, in view of Hobson, *et al.*, and further in view of Herz, *et al.* (US 5,835,087). Withdrawal of this rejection is respectfully requested for at least the following reasons. Herz, *et al.* fails to make up for the aforementioned deficiencies of Johnson, *et al.* and Hobson, *et al.* with respect to claim 1 (from which claim 14 depends). Therefore, it is respectfully submitted that this rejection should be withdrawn.

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CONCLUSION

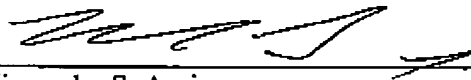
The present application is believed to be condition for allowance in view of the above amendments and comments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP166US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,

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